

ARTICLES — GENERAL

- Massachusetts' post-traumatic stress disorder program: a public health treatment model for Vietnam veterans. 172
Stuart I. Forman and Stephen Havas

- Distance between homes and exercise facilities related to frequency of exercise among San Diego residents. 179
James F. Sallis, Melbourne F. Hovell, C. Richard Hofstetter, John P. Elder, Mimi Hackley, Carl J. Caspersen, and Kenneth E. Powell

- Public concern about chemicals in the environment: regional differences based on threat potential. 186
Holly L. Howe

- Smokeless tobacco use among Native American school children. 196
Bonnie Bruerd

- Continuing unsafe sex: assessing the need for AIDS prevention counseling. 202
Roger A. Roffman, Mary R. Gillmore, Lewayne D. Gilchrist, Sonia A. Mathias, and Leigha Krueger

DEPARTMENTS

- NATIONAL CENTER FOR HEALTH INFORMATION PROGRAMS, PRACTICES, PEOPLE 211

Injury surveillance data computerized by IHS, CDC, *Lewis S. Colwell, Jr., and Suzanne M. Smith* — New York launches alcohol intervention demonstration in 11 hospitals statewide — Two learning disability research centers created at Yale and Johns Hopkins — HHS awards \$2.4 million for rare disease research — Pesticide residues in U.S. food minimal, FDA says — ADAMHA awards record total of alcohol and drug grants — Agency for Health Care Policy and Research established, *William LeVee* — HHS releases special report on alcoholism and health — NTS will teach health professionals about alcohol and other drug problems

INFORMATION FOR CONTRIBUTORS 216

COVER 3

Health, United States, 1989: Heart disease decline keeps U.S. life expectancy at record level



U.S. DEPARTMENT OF
HEALTH AND HUMAN SERVICES
 Louis W. Sullivan, MD, Secretary



PUBLIC HEALTH SERVICE

James O. Mason, MD, DrPH
 Assistant Secretary for Health

Antonia C. Novello, MD, MPH
 Surgeon General

PUBLIC HEALTH REPORTS
 (USPHS 324-990)
 ISSN 0033-3539

Editorial Staff

Marian Priest Tebben, *Executive Editor*
 Dan Taylor, *Associate Editor*
 Marion Hearon, *Assistant Editor*
 Harold M. Ginzburg, MD, JD, MPH,
Contributing Editor
 Ronald J. Kostraba, *Conceptual Design*
 Donna J. Young, *Art Director*

Public Health Reports is published six times a year. Opinions expressed are the authors' and do not necessarily reflect the views of *Public Health Reports* or the Public Health Service. Trade names are used for identification only and do not represent an endorsement by the Service.

The Secretary of Health and Human Services has determined that the publication of this periodical is necessary in the transaction of the public business required by law of this Department. Use of funds for printing this periodical has been approved by the Director of the Office of Management and Budget through September 30, 1990.

Address correspondence to:

Editor, *Public Health Reports*
 Parklawn Building, Room 13C-26
 5600 Fishers Lane
 Rockville, MD 20857
 (301) 443-0762

Subscription Information

Public Health Reports is for sale for \$9 a year domestic subscription and \$11.25 foreign. Single copies are \$4.75 domestic and \$5.94 foreign. Purchase from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.

References

1. McKusick, L., Horstman, W., and Coates, T. J.: AIDS and sexual behavior reported by gay men in San Francisco. *Am J Public Health* 75: 493-496 (1985).
2. Puckett, S. B., Bart, M., Mye, L. L., and Amory, J.: Self-reported behavioral change among gay and bisexual men—San Francisco. *MMWR* 34: 613-615, Oct. 11, 1985.
3. Coates, T.J., et al.: AIDS: a psychosocial research agenda. *Ann Behav Med* 9: 21-28 (1987).
4. Valdisseri, R. O., et al.: The effect of group education on improving attitudes about AIDS risk reduction. *NY State J Med* 87: 272-278, May 1987.
5. Handsfield, H.: Letter to the editor. *Am J Public Health* 75: 1449 (1985).
6. Handsfield, H. H.: Decreasing incidence of gonorrhea in homosexually active men—minimal effect on risk of AIDS. *West J Med* 143: 469-470 (1985).
7. Doll, L.S.: Self-reported changes in sexual behaviors in gay and bisexual men from the San Francisco city clinic cohort. Paper presented at the Third International Conference on AIDS, Washington, DC, June 1987.
8. McKusick, L., Coates, T., and Horstman, W.: HTLV-III transmitting behavior and desire for HTLV-III antibody testing in San Francisco men at risk for AIDS 1982-1985. Paper presented at the Third International Conference on AIDS, Washington, DC, June 1987.
9. McKusick, L., Horstman, W., and Coates, T. J.: AIDS and sexual behavior in New York City. *Am J Public Health* 77: 578-581 (1987).
10. Martin, J. L.: AIDS risk reduction recommendations and sexual behavior patterns among gay men: a multifaceted categorized approach to assessing change. *Health Educ Q* 13: 347-358 (1986).
11. Research and Decisions Corporation: A report on: designing an effective AIDS prevention campaign strategy for San Francisco: results from the third probability sample of an urban gay male community. The San Francisco AIDS Foundation, San Francisco, 1986.
12. Kelly, J. A., and St. Lawrence, J. S.: Behavioral intervention and AIDS. *Behav Therapist* 6: 121-125 (1986).
13. Kelly, J. A., and St. Lawrence, J. S.: The prevention of AIDS: roles for behavioral intervention. *Scand J Behav Ther* 16: 5-19 (1987).
14. Coleman, E.: Sexual compulsivity: definition, etiology, and treatment considerations. *J Chem Depend Treat* 1: 189-203 (1987).
15. Quadland, M. C.: Compulsive sexual behavior: definition of a problem and an approach to treatment. *J Sex Marital Ther* 11: 121-132 (1985).
16. Quadland, M. C., and Shattls, W. D.: AIDS, sexuality, and sexual control. *J Homosexuality* 14: 277-298 (1987).

Order Processing Code

***6731 Superintendent of Documents Subscription Order Form**

☐ **YES,** please send me the following indicated subscriptions:

Public Health Reports. \$9.00 domestic and \$11.25 foreign.

The total cost of my order is \$_____. Prices include regular domestic postage and handling and are subject to change. International customers please add 25%.

(Company or personal name) (Please type or print)

(Additional address/attention line)

(Street address)

(City, State, ZIP Code)

()

(Daytime phone including area code)

Please Choose Method of Payment:

☐ Check payable to the Superintendent of Documents

<div style="border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center; margin-bottom: 5px;"> 1 </div> <div style="border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center; margin-bottom: 5px;"> 2 </div> <div style="border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center; margin-bottom: 5px;"> 3 </div> <div style="border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center; margin-bottom: 5px;"> 4 </div> <div style="border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center; margin-bottom: 5px;"> 5 </div> <div style="border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center; margin-bottom: 5px;"> 6 </div> <div style="border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center; margin-bottom: 5px;"> 7 </div> <div style="border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center; margin-bottom: 5px;"> 8 </div> <div style="border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center; margin-bottom: 5px;"> 9 </div> <div style="border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center; margin-bottom: 5px;"> 0 </div> <div style="border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center; margin-bottom: 5px;"> - </div> <div style="border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center; margin-bottom: 5px;"> . </div> <div style="border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center; margin-bottom: 5px;"> / </div> <div style="border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center; margin-bottom: 5px;"> % </div> <div style="border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center; margin-bottom: 5px;"> ^ </div> <div style="border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center; margin-bottom: 5px;"> _ </div> <div style="border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center; margin-bottom: 5px;"> = </div> <div style="border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center; margin-bottom: 5px;"> < </div> <div style="border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center; margin-bottom: 5px;"> > </div> <div style="border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center; margin-bottom: 5px;"> ← </div> <div style="border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center; margin-bottom: 5px;"> → </div> <div style="border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center; margin-bottom: 5px;"> ↵ </div> <div style="border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center; margin-bottom: 5px;"> ⌫ </div> <div style="border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center; margin-bottom: 5px;"> ⌵ </div> <div style="border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center; margin-bottom: 5px;"> ⌶ </div> <div style="border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center; margin-bottom: 5px;"> ⌷ </div> <div style="border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center; margin-bottom: 5px;"> ⌸ </div> <div style="border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center; margin-bottom: 5px;"> ⌹ </div> <div style="border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center; margin-bottom: 5px;"> ⌺ </div> <div style="border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center; margin-bottom: 5px;"> ⌻ </div> <div style="border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center; margin-bottom: 5px;"> ⌼ </div> <div style="border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center; margin-bottom: 5px;"> ⌽ </div> <div style="border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center; margin-bottom: 5px;"> ⌿ </div> <div style="border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center; margin-bottom: 5px;"> ⌾ </div> <div style="border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center; margin-bottom: 5px;"> ⌿ </div> <div style="border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center; margin-bottom: 5px;"> ⌾ </div> <div style="border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center; margin-bottom: 5px;"> ⌿ </div> <div style="border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center; margin-bottom: 5px;"> ⌾ </div> <div style="border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center; margin-bottom: 5px;"> ⌿ </div> <div style="border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center; margin-bottom: 5px;"> ⌾ </div> <div style="border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center; margin-bottom: 5px;"> ⌿ </div> <div style="border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center; margin-bottom: 5px;"> ⌾ </div> <div style="border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center; margin-bottom: 5px;"> ⌿ </div> <div style="border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center; margin-bottom: 5px;"> ⌾ </div> <div style="border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center; margin-bottom: 5px;"> ⌿ </div> <div style="border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center; margin-bottom: 5px;"> ⌾ </div> <div style="border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center; margin-bottom: 5px;"> ⌿ </div> <div style="border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center; margin-bottom: 5px;"> ⌾ </div> <div style="border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center; margin-bottom: 5px;"> ⌿ </div> <div style="border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center; margin-bottom: 5px;"> ⌾ </div> <div style="border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center; margin-bottom: 5px;"> ⌿ </div> <div style="border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center; margin-bottom: 5px;"> ⌾ </div> <div style="border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center; margin-bottom: 5px;"> ⌿ </div> <div style="border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center; margin-bottom: 5px;"> ⌾ </div> <div style="border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center; margin-bottom: 5px;"> ⌿ </div> <div style="border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center; margin-bottom: 5px;"> ⌾ </div> <div style="border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center; margin-bottom: 5px;"> ⌿ </div> <div style="border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center; margin-bottom: 5px;"> ⌾ </div> <div style="border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center; margin-bottom: 5px;"> ⌿ </div>

☐ **VISA or MasterCard Account**[illegible]

(Credit card expiration date)

Thank you for your order!

(Signature)

**Charge
your
order.
It's
easy!**



53

**To fax your
orders and
inquiries—
(202) 275-0019**

Mail To: Superintendent of Documents, Government Printing Office,
Washington, DC 20402-9371

1/90

INFORMATION FOR CONTRIBUTORS

PUBLIC HEALTH REPORTS, published by the Public Health Service, welcomes from any source contributions of value to public health, disease prevention, health promotion, medical care, and community medicine.

Scientific papers concerned with the delivery of health services and with the many facets of health care, as well as technical reports documenting studies and research, are especially suitable. We also seek papers on new programs, new projects, and new ideas, even when they are experimental in nature. We are interested in both full-length papers and less formal, news-oriented papers, under 1,500 words, for the Programs, Practices, and People sections. *Public Health Reports* wants to record what is currently happening in the health field.

To spur lively debate and examination of public health issues, letters to the editor are encouraged; letters are limited to 500 words and 10 references. Topics are limited to comments on specific articles or other items appearing in the journal.

Manuscript form. To facilitate review, authors should submit four copies of their manuscripts. All copy, including references, should be typed double spaced. Each chart and table should be placed on a separate sheet of paper. References should follow the style used by the journal; "et al." should be used only if there are more than four authors. Footnotes should be worked into the text. Authors' affiliation should appear on a separate sheet. Authors are expected to recognize scientific contributions by those who have assisted them only if such contributions warrant mention in the author identification space or in the text. Journal policy does not allow publication of separate "acknowledgements." Black and white photos and charts that illustrate papers are welcome.

More detailed instructions, including examples of our reference style and information on the preparation of a synopsis, will be supplied on request.

Manuscript review. Most manuscripts submitted for publication are reviewed by technical experts in the Public Health Service as well as experts not associated with the Service. Authors are given the opportunity to consider reviewers' comments or suggestions. They also receive edited typescripts for approval. Authors are responsible for the accuracy and validity of all material, including tables, charts, and references.

Manuscripts are reviewed with the understanding that they have not been submitted for publication elsewhere. Appropriate information should be supplied if a paper has been presented at or prepared for a meeting.

Tearsheets. In lieu of reprints, senior authors are provided with 100 sets of tearsheets after publication.

Secondary publication and indexing. Secondary publication of articles is provided in various abstracting journals (Abstracts for Social Workers, Current Literature in Family Planning). Articles are indexed in the annual Cumulated Index Medicus and monthly Index Medicus (National Library of Medicine), Engineering Index, Hospital Literature Index (American Hospital Association), Cumulative Index to Nursing and Allied Health Literature, American Statistics Index, and Medical Socioeconomic Research Sources (MEDSOC), as well as in the Institute for Scientific Information's Current Contents (Social and Behavioral Sciences, Life Sciences, and Physical & Chemical Sciences), Social Sciences Citation Index, Bibliographic Index of Health Education Periodicals, and Science Citation Index. Full text is available on the MEDIS data base, and synopses are available on the GTE Telenet Medical Information Network.

Address correspondence on editorial matters to:

Editor
PUBLIC HEALTH REPORTS
Room 13C-26 Parklawn Bldg.
5600 Fishers Lane
Rockville, MD 20857

Area Code 301-443-0762

Heart Disease Decline Keeps U.S. Life Expectancy at Record Level

Overall life expectancy at birth in the United States reached 75 years in 1987 and remained at that record high in 1988. A major factor in the continued rise in life expectancy is the downward trend in mortality from cardiovascular disease. Age-adjusted death rates for heart disease, the leading cause of death, declined 33 percent from 1970 to 1987; stroke mortality was down 54 percent during the same period.

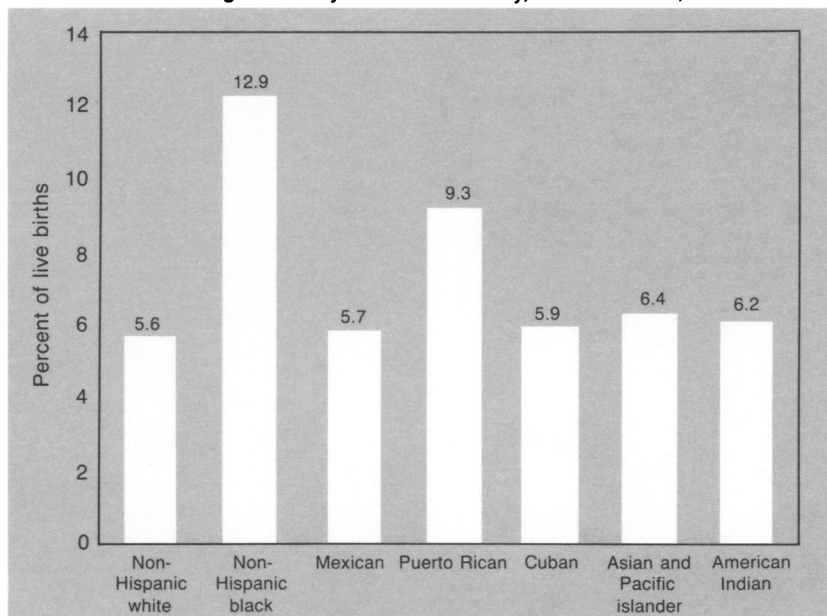
While overall health improves, current statistics document striking disparities in the health of blacks and other minorities. Life expectancy for black males declined again in 1988 to 65.1 years at birth, after an unprecedented 2-year decline between 1984 and 1986, with no further change in 1987. The gap between the white and black infant mortality rate widened between 1986 and 1987, with a 3-percent decline in the rate for white infants to 8.6 deaths per 1,000 live births and a less than 1 percent decline for black infants to 17.9 deaths per 1,000 live births.

These and other statistics on the health of the nation appear in "Health, United States, 1989," the 14th in a series of reports from the Secretary of Health and Human Services to the President and the Congress. This volume also contains the fourth triennial "Prevention Profile," charting progress toward meeting the 1990 Objectives in Health Promotion and Disease Prevention. The 1989 health report shows continuing trends in four major areas: health status and determinants, use of health resources, health care resources, and health care expenditures. Highlights of the report:

Health Status and Determinants

- In 1988, 60 percent of women 15–44 years of age used some method of contraception. Among formerly and currently married women using contraception in 1988, female sterilization was the most frequently used method. Almost 60 percent of never married women used birth control pills while 20 percent chose condoms as their method of contraception, up from 12 percent in 1982.
- The percent of low birth weight infants has remained essentially unchanged during the 1980s at 7 percent (see chart). However, there are large differences among ethnic and racial groups, with rates highest among black (12.7) and Puerto Rican infants (9.3).

Low birth weight rates by race and ethnicity, United States, 1987



SOURCE: National Center for Health Statistics, Division of Vital Statistics

- As of September 30, 1989, more than 63,000 deaths occurred among persons with acquired immunodeficiency syndrome (AIDS). Homosexual and bisexual activity as a conduit for the human immunodeficiency virus (HIV) that causes AIDS accounted for more than 77 percent of the 36,000 deaths among white non-Hispanic persons with AIDS 13 years of age and older, compared to 38 percent of the 17,600 black non-Hispanic deaths and 53 percent of the Hispanic AIDS deaths. By contrast, 7 percent of the white non-Hispanic deaths, 37 percent of the black non-Hispanic deaths, and 24 percent of the Hispanic deaths were in the intravenous drug use transmission category.

Health Care Resources

- There were 71,000 discharges from non-Federal short-stay hospitals with a diagnosis of AIDS in 1988. Men 20–49 years of age accounted for 82 percent of all AIDS discharges. Almost 1 million days of care were provided to AIDS patients, whose average length of stay (13.8 days) was more than twice that (6.5 days) for all discharges.
- Short-stay hospital admissions declined 10 percent between 1984 and 1987, from 37.1 million to 33.6 million. In contrast, outpatient visits in short-stay hospitals increased 12 percent during this

period from 268 to 301 million.

- Between 1980 and 1987, active registered nurses with baccalaureate degrees increased by 47 percent and registered nurses with master's and doctorate degrees increased by 44 percent. Between 1987 and 1988, first-year enrollment in nursing schools rose 4 percent, reversing the 27-percent decline observed over the previous 3 years.

Health Expenditures

- In 1987, national health care expenditures in the United States totaled \$500 million, an average of \$1,987 per person. U.S. health spending continues to account for a larger share of gross domestic product (GDP) than in other major industrialized countries, and the gap continues to widen. In 1987, the United States devoted 11.2 percent of its GDP to health, a 3-percent increase over the previous year.
 - Expenditures for HIV-related activities by the Federal Government increased from \$6 million in 1982 to \$1.5 billion in 1988. Of the total in 1988, 40 percent was for research, 31 percent for medical care, 23 percent for education and prevention, and 6 percent for cash assistance.
- Obtain "Health, United States, 1989" from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. The stock number is 017-022-01104-2. Price \$19.

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Public Health Service
Room 13C-26 Parklawn Bldg.
5600 Fishers Lane
Rockville, MD 20857

Second-Class Mail
Postage and Fees Paid
PHS-OASH
ISSN 0033-3539

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$300
